Remarks

The Applicant wishes to thank the Examiner for interviewing this case on November 10, 2009. During that interview amendments necessary to address the §101 rejections were discussed as well as distinctions between the present invention and the Stevens reference. No agreement was reached with respect to allowance of the claims.

Claim Rejections-35 USC §101

Claims 18 and 21-23 have been rejected under 35 USC §101. Claim 18 has been canceled and claim 21 amended to address this rejection by expressly reciting an electronic computer executing a stored program and to eliminate some "means for" language. The Applicant is open to other formal amendments that may be necessary to address this rejection.

Claim Rejections-35 USC §103

Claims 1-3, 8, 14-19 and 21-23 have been rejected under 35 USC §103(a) as being unpatentable over Thibault in view of Stawikowski and in further view of Stevens.

Generally, the present invention allows components of an industrial controller to respond to and forward web data (e.g. HTTP data) even though they are attached to a control network that is not compatible with Internet signals (TCP/IP) and do not have sufficient computing resources to implement a full Web server stack. The invention works by receiving Internet signals at a web interface forming part of the industrial control and stripping out the top-level Internet data. In the amended claims, this top level data is now termed "Internet application-level socket API data." This separated top-level data is then exchanged over the control network (using the control network protocol) between the web interface and the I/O modules. The effect is that a standard browser can communicate with the I/O modules as if they held full Web servers allowing a user to obtain important product data related to the I/O modules stored directly in the I/O modules, for example, at the time of manufacture. The ability to work with socket API data ensures that this data will be readable in the future despite changes in the control network, under the assumption that Internet type browsers will always be able to read legacy socket-API data.

Thibault teaches a system that would broadly be understood to be an industrial controller and that can receive Internet signals and reply using data from devices that are analogous to I/O modules. Nevertheless, the Applicant does not believe that Thibault teaches forwarding Internet application-level socket API data to the I/O modules. Instead it appears that Thibault employs a proprietary "API" that should not be confused with Internet application-level socket API data.

Stawikowski does appear to teach communicating Internet application-level socket API data (SOAP data) but does so on an IP network (50). So neither Stawikowski nor Thibault teach communicating Internet application-level socket API data on a non-Internet type network nor any specific motivation to do so.

The reference to Stevens does teach a bridge between a TCP/IP type network and a proprietary IBM network that does not appear to be compatible with TCP/IP. But again, there does not appear to be any transmission of Internet application-level socket API data over a non-Internet type control network. At best, it appears that Stevens teaches transmitting non-Internet application-level socket API data over an Internet type network.

While the Applicant does not contest the fact that these networks and data types are known in the art, it is believed that the prior art does not fairly teach or suggest the present invention, particularly in the context of an industrial control system.

Claims 10-20 have been canceled in the interest of expediting the prosecution. A new claim 24 is offered as an alternative to claim 1 but would be canceled in favor of other allowable claims.

Conclusions

In light of these remarks and amendments, it is believed that claims 1-9, 21-23 are now in condition for allowance and allowance is respectfully requested. The Examiner is encouraged to contact the undersigned if minor amendments are needed in the figures, specification, or claims to bring this case into allowance.

Respectfully submitted,

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